

RATIONALE

"INACTIVE" REPLACED BY "NOT RECOMMENDED." CLASSES 3A AND 3B ADDED TO TABLE 1 HEADING FOR THE THREADS. MATERIAL CODE LETTER R, CRES 321, INTRODUCED AS AN OPTIONAL MATERIAL. FINISH FOR MATERIAL CODE LETTER R BEING INTRODUCED. PROCUREMENT SPECIFICATION NOTE UPDATED TO CURRENT QML VERBIAGE. NOTE /8/ UPDATED SPECIFYING THAT PORT #1 IS EQUAL TO OR GREATER THAN PORT #2. UPDATED SPECIFICATION CALLOUT FROM MIL-A-8625 TO MIL-PRF-8625. NOTE /17/ REVISED TO REFLECT OPTIONAL DRY FILM CODE LETTER N CALLOUT FOR SWIVEL NUT. NEW USAGE RECOMMENDATION FOR MATERIAL 347 ADDED TO NOTE /18/.

REV. C
AS4411™

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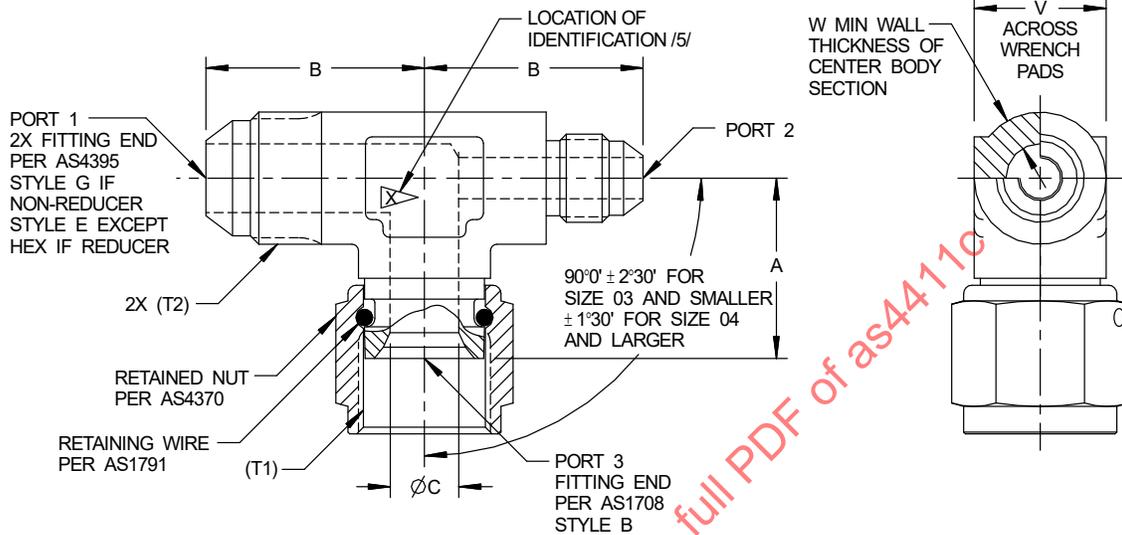


FIGURE 1 - FITTING ASSEMBLY, TEE

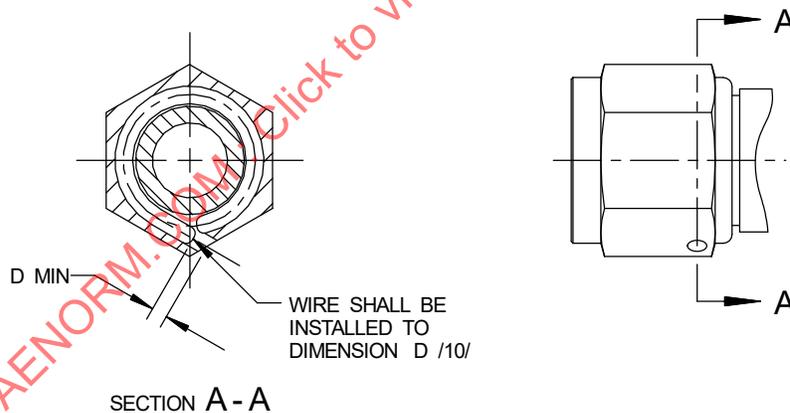
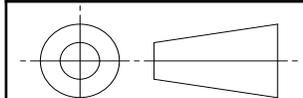


FIGURE 2 - INSTALLATION, RETAINED NUT AND RETAINING WIRE

NOT RECOMMENDED IN PART /18/

For more information on this standard, visit
<https://www.sae.org/standards/content/AS4411C/>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: AS4841 /4/



AEROSPACE STANDARD

FITTING ASSEMBLY, TEE, REDUCER AND
NONREDUCER, INTERNAL FLARE ON SIDE
TO FLARED TUBE

AS4411™
SHEET 1 OF 6

REV. C

TABLE 1 - DIMENSIONS C-W AND WEIGHTS

BASIC NO. AS4411 /17/ SIZE CODE	(NOMINAL TUBE SIZE)	T1, T2 THREAD PER AS8879 CLASS 3B, 3A	C	D	V	W	LB/EA APPROX REF ALUM	LB/EA APPROX REF CRES	LB/EA APPROX REF TI
02	.125	.3125-24 UNJF	.058- .065	.045	.297- .314	.090	.022	.063	.036
03	.188	.3750-24 UNJF	.121- .128	.045	.360- .377	.100	.028	.081	.046
04	.250	.4375-20 UNJF	.168- .175	.045	.423- .440	.110	.036	.105	.060
05	.312	.5000-20 UNJF	.230- .237	.045	.485- .502	.120	.045	.132	.076
06	.375	.5625-18 UNJF	.293- .301	.045	.547- .565	.120	.061	.177	.101
08	.500	.7500-16 UNJF	.387- .395	.055	.735- .753	.150	.113	.327	.187
10	.625	.8750-14 UNJF	.480- .488	.063	.860- .878	.170	.155	.449	.257
12	.750	1.0625-12 UNJ	.604- .614	.095	1.047-1.065	.185	.280	.814	.466
16	1.000	1.3125-12 UNJ	.839- .851	.125	1.292-1.317	.205	.407	1.180	.676
20	1.250	1.6250-12 UNJ	1.073-1.086	.155	1.605-1.630	.240	.748	2.170	1.243
24	1.500	1.8750-12 UNJ	1.307-1.320	.180	1.855-1.880	.250	.996	2.890	1.655
32	2.000	2.5000-12 UNJ	1.776-1.791	.180	2.542-2.572	.350	1.302	3.780	2.165

TABLE 2 - LEG LENGTH A

SIZE OF PORT #3	FORG. SIZE /8/ 02	FORG. SIZE /8/ 03	FORG. SIZE /8/ 04	FORG. SIZE /8/ 05	FORG. SIZE /8/ 06	FORG. SIZE /8/ 08	FORG. SIZE /8/ 10	FORG. SIZE /8/ 12	FORG. SIZE /8/ 16	FORG. SIZE /8/ 20	FORG. SIZE /8/ 24	FORG. SIZE /8/ 32
02	.658	.686	.743	.767	.884	.924	1.100	1.157	1.268	1.521	1.521	2.031
03	--	.672	.555	.587	.649	.743	.838	.931	1.056	1.213	1.338	2.015
04	--	--	.602	.633	.695	.789	.883	.976	1.101	1.258	1.383	1.890
05	--	--	--	.675	.737	.831	.925	1.018	1.143	1.300	1.425	1.937
06	--	--	--	--	.821	.915	1.009	1.102	1.227	1.384	1.509	1.968
08	--	--	--	--	--	1.023	1.117	1.210	1.334	1.491	1.616	2.130
10	--	--	--	--	--	--	1.167	1.260	1.383	1.540	1.665	2.098
12	--	--	--	--	--	--	--	1.224	1.348	1.505	1.630	2.098
16	--	--	--	--	--	--	--	--	1.387	1.524	1.649	2.150
20	--	--	--	--	--	--	--	--	--	1.571	1.696	2.243
24	--	--	--	--	--	--	--	--	--	--	1.776	2.286
32	--	--	--	--	--	--	--	--	--	--	--	2.442

TABLE 3 - LEG LENGTH B

SIZE OF PORT #1 OR #2	FORG. SIZE /8/ 02	FORG. SIZE /8/ 03	FORG. SIZE /8/ 04	FORG. SIZE /8/ 05	FORG. SIZE /8/ 06	FORG. SIZE /8/ 08	FORG. SIZE /8/ 10	FORG. SIZE /8/ 12	FORG. SIZE /8/ 16	FORG. SIZE /8/ 20	FORG. SIZE /8/ 24	FORG. SIZE /8/ 32
02	.757	.789	.789	.843	.946	1.033	1.135	1.232	1.341	1.544	1.685	2.169
03	--	.820	.811	.874	.977	1.064	1.166	1.263	1.372	1.575	1.716	2.200
04	--	--	.882	.945	1.048	1.135	1.237	1.334	1.443	1.646	1.787	2.271
05	--	--	--	.945	1.048	1.135	1.237	1.334	1.443	1.646	1.787	2.271
06	--	--	--	--	1.054	1.141	1.243	1.340	1.449	1.652	1.793	2.277
08	--	--	--	--	--	1.242	1.344	1.441	1.555	1.753	1.894	2.378
10	--	--	--	--	--	--	1.445	1.542	1.651	1.854	1.995	2.479
12	--	--	--	--	--	--	--	1.648	1.757	1.960	2.101	2.585
16	--	--	--	--	--	--	--	--	1.804	2.007	2.148	2.632
20	--	--	--	--	--	--	--	--	--	2.054	2.195	2.679
24	--	--	--	--	--	--	--	--	--	--	2.320	2.804
32	--	--	--	--	--	--	--	--	--	--	--	3.054

NOTES:

NOTICE

THIS DOCUMENT REFERENCES A PART WHICH CONTAINS CADMIUM AS A PLATING MATERIAL. CONSULT LOCAL OFFICIALS IF YOU HAVE QUESTIONS CONCERNING CADMIUM'S USE.

/1/ MATERIAL:

A. DASH AS CODE LETTER:

- (1) BODY: TYPE 4130 STEEL FORGING OR BAR PER AMS6370 OR AMS-S-6758.
- (2) NUT: DASH AS CODE LETTER OF AS4370 (TYPE 4130 STEEL).
- (3) WIRE: PER AS1791 (CLASS 302 OR 305 CORROSION RESISTANT STEEL).

B. CODE LETTER D /18/:

- (1) BODY: TYPE 2014-T6 ALUMINUM ALLOY FORGING PER AMS4133; OR TYPE 2024-T6 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/6; OR TYPE 2024-T851 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/6 OR AMS4339.
- (2) NUT: CODE LETTER D OF AS4370 (TYPE 2024 ALUMINUM ALLOY).
- (3) WIRE: PER AS1791 (CLASS 302 OR 305 CORROSION RESISTANT STEEL).

C. CODE LETTER J:

- (1) BODY: TYPE 304 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS5639 OR AMS-QQ-S-763.
- (2) NUT: CODE LETTER J OF AS4370 (TYPE 304 CORROSION RESISTANT STEEL).
- (3) WIRE: PER AS1791 (CLASS 302 OR 305 CORROSION RESISTANT STEEL).

D. CODE LETTER K:

- (1) BODY: TYPE 316 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS5648 OR AMS-QQ-S-763.
- (2) NUT: CODE LETTER K OF AS4370 (TYPE 316 CORROSION RESISTANT STEEL).
- (3) WIRE: PER AS1791 (CLASS 302 OR 305 CORROSION RESISTANT STEEL).

E. CODE LETTER R:

- (1) BODY: TYPE 321 CORROSION RESISTANT STEEL BAR PER AMS5645 OR AMS-QQ-S-763.
- (2) NUT: CODE LETTER R OF AS4370 (TYPE 321 CORROSION RESISTANT STEEL).
- (3) WIRE: PER AS1791 (CLASS 302 OR 305 CORROSION RESISTANT STEEL).

F. CODE LETTER S: /18/

- (1) BODY: TYPE 347 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS5646 OR AMS-QQ-S-763.
- (2) NUT: CODE LETTER S OF AS4370 (TYPE 347 CORROSION RESISTANT STEEL).
- (3) WIRE: PER AS1791 (CLASS 302 OR 305 CORROSION RESISTANT STEEL).

G. CODE LETTER T:

- (1) BODY: TYPE 6AL-4V TITANIUM ALLOY FORGING OR BAR PER AMS4928.
- (2) NUT: CODE LETTER T OF AS4370 (TYPE 6AL-4V TITANIUM ALLOY).
- (3) WIRE: PER AS1791 (CLASS 302 OR 305 CORROSION RESISTANT STEEL).

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H. CODE LETTER W:

- (1) BODY: TYPE 7075-T73 ALUMINUM ALLOY FORGING PER AMS4141; OR TYPE 7075-T7351 ALUMINUM ALLOY BAR PER AMS4124; OR TYPE 7075-T3 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/9.
- (2) NUT: CODE LETTER W OF AS4370 (TYPE 7075 ALUMINUM ALLOY).
- (3) WIRE: PER AS1791 (CLASS 302 OR 305 CORROSION RESISTANT STEEL).

2. HEAT TREATMENT PER PROCUREMENT SPECIFICATION.

3. FINISH:

A. DASH AS MATERIAL CODE LETTER:

- (1) BODY: CADMIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 2, DYE BLACK.
- (2) NUT: DASH AS MATERIAL CODE LETTER OF AS4370 (CADMIUM PLATE, DYED BLACK).
- (3) WIRE: PER AS1791 (PASSIVATE AND COAT WITH DRY FILM LUBRICANT).

B. MATERIAL CODE LETTER D:

- (1) BODY: ANODIZE PER AMS2472 OR MIL-PRF-8625, TYPE II, CLASS 2, DYE BLUE, DUPLEX SEAL.
- (2) NUT: MATERIAL CODE LETTER D OF AS4370 (ANODIC COATING, DYE BLUE).
- (3) WIRE: PER AS1791 (PASSIVATE AND COAT WITH DRY FILM LUBRICANT).

C. MATERIAL CODE LETTER J:

- (1) BODY: PASSIVATE PER AMS2700, TYPE 6 OR TYPE 7.
- (2) NUT: MATERIAL CODE LETTER J OF AS4370 (PASSIVATED).
- (3) WIRE: PER AS1791 (PASSIVATE AND COAT WITH DRY FILM LUBRICANT).

D. MATERIAL CODE LETTER K:

- (1) BODY: PASSIVATE PER AMS2700, TYPE 6 OR TYPE 7.
- (2) NUT: MATERIAL CODE LETTER K OF AS4370 (PASSIVATED).
- (3) WIRE: PER AS1791 (PASSIVATE AND COAT WITH DRY FILM LUBRICANT).

E. MATERIAL CODE LETTER R:

- (1) BODY: PASSIVATE PER AMS2700, TYPE 6 OR TYPE 7.
- (2) NUT: MATERIAL CODE LETTER R OF AS4370 (PASSIVATED).
- (3) WIRE: PER AS1791 (PASSIVATE AND COAT WITH DRY FILM LUBRICANT).

F. MATERIAL CODE LETTER S:

- (1) BODY: PASSIVATE PER AMS2700, TYPE 6 OR TYPE 7.
- (2) NUT: MATERIAL CODE LETTER S OF AS4370 (PASSIVATED).
- (3) WIRE: PER AS1791 (PASSIVATE AND COAT WITH DRY FILM LUBRICANT).

G. MATERIAL CODE LETTER T:

- (1) BODY: ANODIZE PER AMS2488 TYPE 2 OR FLUORIDE PHOSPHATE CONVERSION COAT PER AMS2486.
- (2) NUT: MATERIAL CODE LETTER T OF AS4370 (FLUORIDE PHOSPHATE CONVERSION COAT).
- (3) WIRE: PER AS1791 (PASSIVATE AND COAT WITH DRY FILM LUBRICANT).

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